

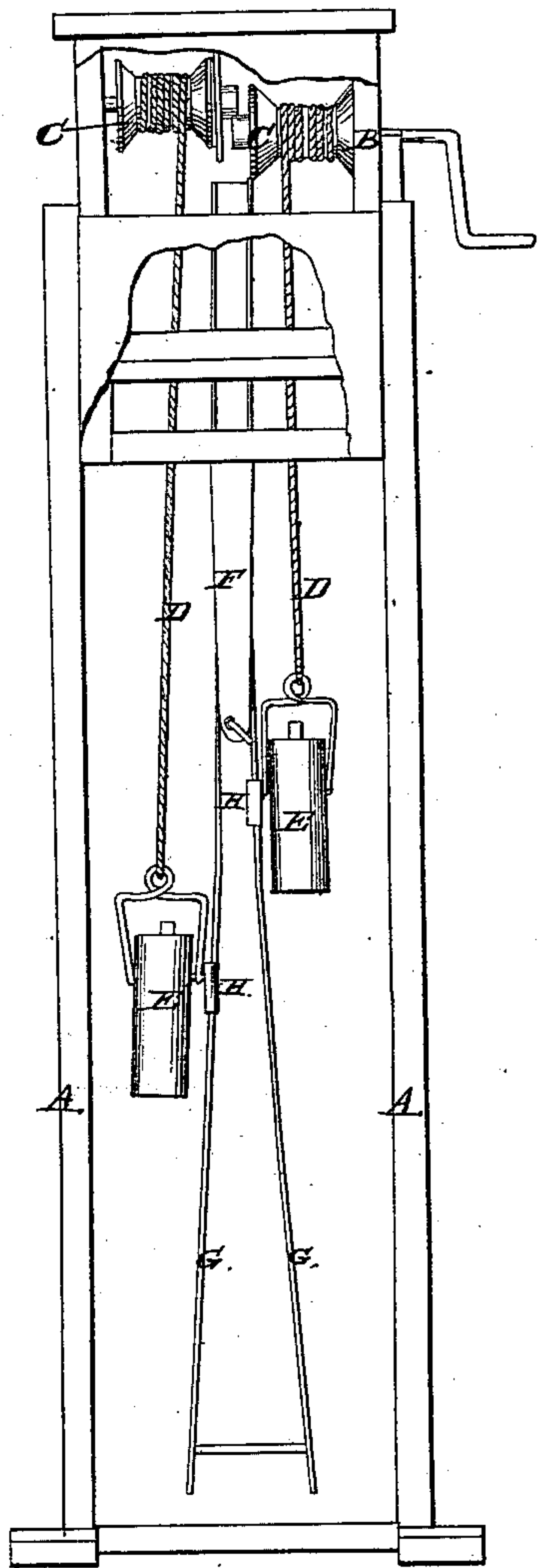
*L. Raymond*

*Windlass Water Elevator,*

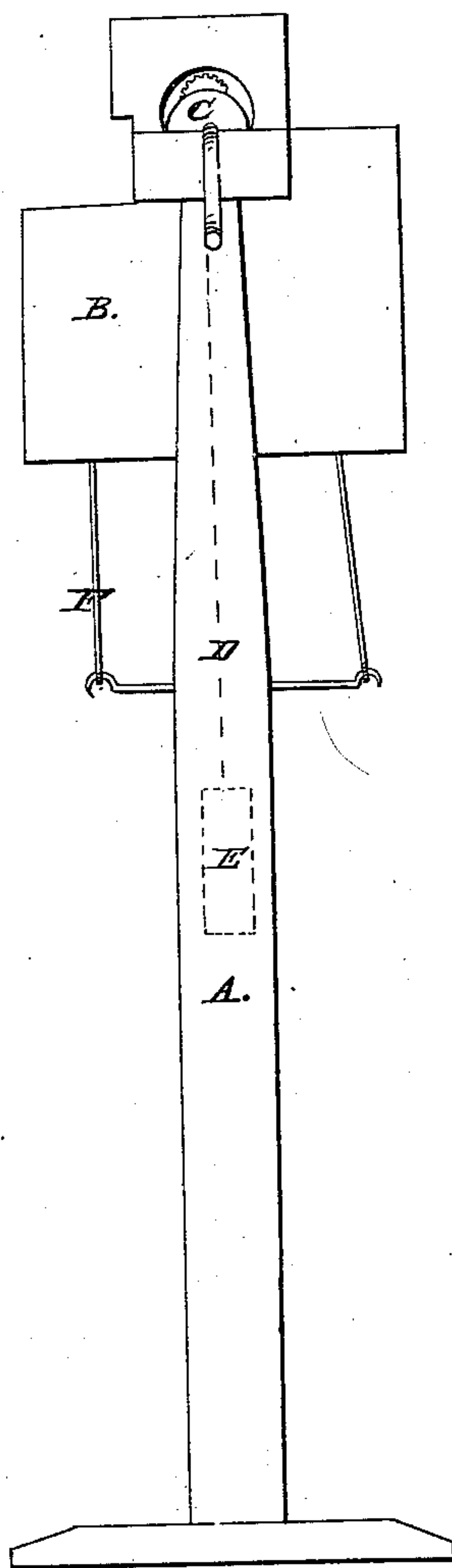
*Patented Dec. 8, 1868.*

*N<sup>o</sup> 84,841.*

*Fig. 1.*



*Fig. 2.*



*Witnesses:*  
*J. H. Burridge,*  
*E. E. Waite*

*Inventor.*  
*L. Raymond*



LIBERTY RAYMOND, OF GREEN, OHIO.

Letters Patent No. 84,841, dated December 8, 1868.

IMPROVEMENT IN WATER-ELEVATORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, LIBERTY RAYMOND, of Green, in the county of Trumbull, and State of Ohio, have invented certain new and useful Improvements in Water-Drawers; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front view of the apparatus.

Figure 2, a side view.

Like letters of reference refer to like parts in the different views.

The nature of my invention relates to drawing water from wells by means of two buckets, and in such a way that said buckets shall not interfere with each other on passing in the well.

A, in fig. 1, represents the sides of the well.

B, the curb, in which are the pulleys C, forming the windlass, and around which the rope D is wound on drawing up the buckets E.

F, fig. 2, is a swing or trapeze, from which are suspended the guides G, which descend to the water, and near to the bottom of the well, as shown in the drawing.

To said guides are attached the buckets, by means of the slides or clamps H, which, as the buckets, on being drawn up or lowered, will follow the direction of the guide to which they are attached, are thereby prevented from swinging about, and not only prevented from striking together on passing each other, but also from striking against the sides of the well.

This colliding of the buckets, and then striking against the walls of the well, has always been a serious objection to the use of two buckets in raising water, as, by their collision with each other, they often become entangled, so that much time and labor are required

to separate them. There is also a consequent spilling of the water. Hence the bucket is but partially filled on reaching the top, thus making it necessary that another bucketful should be drawn in order to obtain a pailful of water.

The buckets are also injured by the repeated blows received from each other, and by their striking against the wall, which is also often injured by the dislodgment of a stone or brick of which the wall is made up.

It will be obvious that by the use of the guides, in the manner as above described, these objections and difficulties are all removed, as the buckets ascend and descend without interfering, they being restrained, by the slider, from swinging about, and striking each other, or against the wall.

It will be observed that the lower ends of the guide recede from each other, whereas the upper ends are very much nearer together, the purpose of which is to allow the rope to be at all times perpendicular in the well, so that, as the rope unwinds from the spools, the bucket will be thrown out to one side as fast as the rope is carried out by its unwinding. By this means the draught upon the bucket is in a right line, and therefore will not draw the lower end of the guide to one side of the well on raising the bucket, which would be the case were the guides straight, or parallel to each other.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The combination of the swing or trapeze F, the inclined guide G, and the cords and pendants D E, all substantially as and for the purpose set forth.

LIBERTY RAYMOND.

Witnesses:

W. H. BURRIDGE,  
E. E. WAITE.